7-024.02 BORREGO VALLEY - OCOTILLO WELLS

Basin Boundaries

Summary

The Ocotillo Wells groundwater subbasin underlies Borrego Valley and Lower Borrego Valley in eastern San Diego County and western Imperial County. The subbasin is bound on the northeast and the east by the Coyote Creek fault and the Superstition Mountain fault. A surface drainage divide separates the subbasin from the adjoining Coyote Wells Valley groundwater basin to the south. The Fish Creek Mountains and Vallecito Mountains bound the west side of the subbasin. The subbasin is separated from the Borrego Springs subbasin to the northwest by San Felipe Creek. The basin boundary is defined by 11 segments detailed in the descriptions below.

Segment Descriptions

Segment Label	Segment Type	Description	Ref
1-2	I Fault	Begins from point (1) and follows the Coyote Creek fault and Superstition Mountain fault to point (2).	{a}
2-3	E Fault	Continues from point (2) and follows the Superstition fault to point (3).	{a}
3-4	I Watershed	Continues from point (3) and approximately follows the Ocotillo Lower Felipe hydrologic subarea to point (4).	{b}
4-5	E Alluvial	Continues from point (4) and follows the contact of Pliocene Imperial Formation with Paleozoic or older metamorphic rocks to point (5).	{c}
5-6	I Unknown	Continues from point (5) and follows an unknown feature connecting Coyote Mountains to Fish Creek Mountains to point (6).	{d}
6-7	E Alluvial	Continues from point (6) and generally follows the contact of Quaternary alluvium and Pliocence Imperial Formation with Miocene Split Mountain Conglomerate and various Mesozoic or older plutonic rocks to point (7).	{e}
7-1	I Stream	Continues from point (7) and follows the San Felipe Creek and ends at point (1).	{f}
8-8	E Alluvial	Island within the basin boundary: begins from point (8) and follows the contact of Quaternary alluvium and Cenozoic Ocotillo Conglomerate that surrounds Mesozoic or older plutonic rocks and ends at point (8).	{e}
9-9	I Alluvial	Island within the basin boundary: begins from point (9) and follows the contact of Quaternary alluvium and Cenozoic Ocotillo Conglomerate that surrounds Mesozoic or older plutonic rocks and ends at point (9).	{e}
10-10	I Alluvial	Island within the basin boundary: begins from point (10) and follows the contact of Quaternary alluvium that surrounds Miocene Split Mountain Conglomerate and ends at point (10).	{a}
11-11	E Alluvial	Island within the basin boundary: begins from point (11) and follows the	{e}

		contact of Quaternary alluvium and Cenozoic Ocotillo Conglomerate that surrounds Mesozoic or older plutonic rocks and ends at point (11).	

Significant Coordinates

Point	Latitude	Longitude
1	33.215874565	-116.222364852
2	32.969058361	-115.872621631
3	32.94417582	-115.825998204
4	32.852610816	-116.037656631
5	32.851792473	-116.043193992
6	32.90188932	-116.025554478
7	33.13643378	-116.297429491
8	33.200745966	-116.209566698
9	33.126047292	-116.242839315
10	33.068269609	-116.116852828
11	33.186832533	-116.175828905

Map

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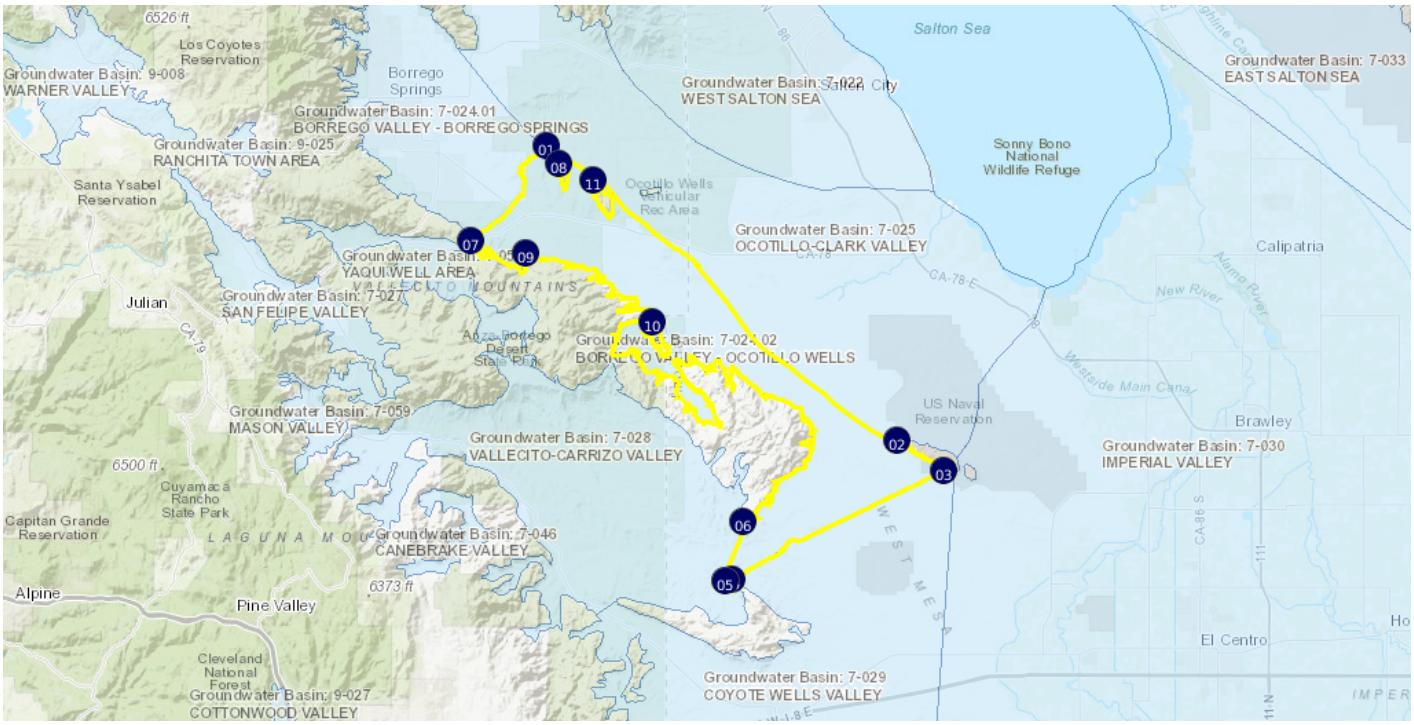

https://sgma.water.ca.gov/webgis/?appid=160718113212&subbasinid=7-024.02

References

Ref	Citation	Pub Date	Global ID
{a}	California Geological Survey (CGS), Geologic Atlas of California Map No. 019, Santa Ana Sheet, 1:250,000, Thomas H. Rogers.URL: http://www.quake.ca.gov/gmaps/GAM/santaana/santaana.html	1965	25
{b}	United States Geological Survey (USGS), National Hydrography Dataset, Watershed Boundary Dataset for California, note: Coordinated effort among the United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), the United States Geological Survey (USGS), and the Environmental Protection Agency (EPA).URL: http://datagateway.nrcs.usda.gov	2016	49
{c}	California Geological Survey (CGS), Geologic Map of California, Geologic Data Map No. 2, C. W. Jennings, C. Gutierrez, W. Bryant, G. Saucedo, and C. Wills.URL: http://maps.conservation.ca.gov/cgs/gmc/	2010	43
{d}	Unknown/other/new	varies	46
{e}	Diblee Geological Foundation, Geologic map of the Borrego & Borrego Mountain quadrangles, 1:24,000, T.W Dibblee and J.A. Minch.	2008	62
{f}	United States Geological Survey (USGS), National Hydrography Dataset, Flowline Dataset for California, note: Coordinated effort among the United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), the United States Geological Survey (USGS), and the Environmental Protection Agency (EPA).URL: http://nhd.usgs.gov/data.html	2/1/2016	1

Footnotes

- I: Internal
- E: External